EAST 10/734,936
LLM 12/1/05

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	6	triple adj homologous adj recombination	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/01 13:23
L2	0	in adj vivo adj chromosom$ adj engineering	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/01 13:24
L3	0	in adj vivo adj chromosom$ adj engineering	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/01 13:46
L4	2033	bacteria$2 and (chromosom$2 adj (engineering or integration))	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2005/12/01 13:47
L5	1477	L4 and @ad<="20021219"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2005/12/01 13:50
L6	6	(triple or multiple) adj homologous adj recombination	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/01 13:48
L7	0	L5 and L6	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/01 13:48
L8	340	((Two adj (DNA near fragment)) or ((first adj recombination adj element) and (second adj recombination adj region) and (bacterial adj chromosome))) and (homologous adj recombination)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2005/12/01 13:49
L9	272	L8 and @ad<="20021219"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2005/12/01 13:49
L10	14	L9 and ((site-specific adj recombinase) or (site adj specific adj recombinase) or Cre/lox or flippase or Flp or Xer/dif or Int/att)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/01 13:49

L11	69	((Red adj (recombinase or recombination) adj system) or (lambda-Red adj (recombinase or recombination) adj system) or (lambda adj Red adj(recombinase or recombination) adj system) or (lambda-Red adj helper adj plasmid) or (lambda adj Red adj helper adj plasmid) or (lambda-Red adj system) or (lambda adj Red adj system) or pKD46)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/01 13:50
L12	30	L11 and @ad<="20021219"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2005/12/01 13:51
L14	1	L12 and L4	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2005/12/01 13:51
L15	27	L12 and ((selectable adj marker) or (kanamycin adj select$4 adj marker) or (antibiotic adj select$4 adj marker) or (enzyme adj select$4 adj marker) or (antibiotic adj resistance adj marker) or (enzymatic adj marker))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/01 13:52
L16	27	L15 and (express$4 DNA adj fragment) and ((regulatory near element) or promoter or orf or (open adj reading adj frame))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/01 13:53
L17	0	L16 and (chromasom$2 adj integration adj (site or region))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/01 13:54
L18	27	L16 and (Escherichia or salmonella or acinetobactor or methylomonas or bacillus or pseudomonas)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/01 13:54
L19	27	L18 ANd ((express$4 DNA adj fragment) and ((regulatory near element) or promoter or orf or (open adj reading adj frame)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/01 13:55
L20	0	L19 and (PCR adj generated adj recombination adj element)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/01 13:56

L21	0	L19 and ((PCR adj generated adj recombination adj element) or (amplified adj recombination adj element))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/01 13:56
L22	39	((first adj recombination adj (region or site)) and ((site-specific or (site adj specific)) adj recombinase) and (selectable adj marker) and (second adj recombination adj (region or site)) and (third adj recombination adj (region or site)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/01 13:58
L23	7	L22 and L4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/01 13:59
L24	2	L22 and L4 and L11	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/12/01 13:59
S1	1	"20040209370"	US-PGPUB; USPAT	OR	ON	2005/12/01 08:58
S2	1	"20040219629"	US-PGPUB; USPAT	OR	ON	2005/11/30 15:27
S3	1	"5888732".pn.	US-PGPUB; USPAT	OR	ON	2005/11/30 15:43
S4	1	"6355412".pn.	US-PGPUB; USPAT	OR	ON	2005/11/30 15:43
S5	6	triple adj homologous adj recombination	US-PGPUB; USPAT	OR	ON	2005/12/01 13:23
S6	1	S5 and @ay<="2002"	US-PGPUB; USPAT	OR	ON	2005/12/01 09:43
S7	0	in adj vivo adj chromosomal adj engineering	US-PGPUB; USPAT	OR	ON	2005/12/01 09:43
S8	0	in adj vivo adj chromosom$ adj engineering	US-PGPUB; USPAT	OR	ON	2005/12/01 13:24
S9	193	chromosom$ adj engineering	US-PGPUB; USPAT	OR	ON	2005/12/01 13:46
S10	139	S9 and @ay<="2002"	US-PGPUB; USPAT	OR	ON	2005/12/01 13:47
S11	139	S9 and @ad<="20021219"	US-PGPUB; USPAT	OR	ON	2005/12/01 10:18
S12	2278	chromosom$ adj (engineering or integration)	US-PGPUB; USPAT	OR	ON	2005/12/01 10:31
S13	1671	S12 and @ad<="20021219"	US-PGPUB; USPAT	OR	ON	2005/12/01 12:29

S14	6	(triple or multiple) adj homologous adj recombination	US-PGPUB; USPAT	OR	ON	2005/12/01 13:48
S15	0	S13 and S14	US-PGPUB; USPAT	OR	ON	2005/12/01 10:33
S16	339	((Two adj (DNA near fragment)) or ((first adj recombination adj element) and (second adj recombination adj region) and (bacterial adj chromosome))) and (homologous adj recombination)	US-PGPUB; USPAT	OR	ON	2005/12/01 13:49
S17	271	S16 and @ad<="20021219"	US-PGPUB; USPAT	OR	ON	2005/12/01 10:29
S18	14	S17 and ((site-specific adj recombinase) or (site adj specific adj recombinase) or Cre/lox or flippase or Flp or Xer/dif or Int/att)	US-PGPUB; USPAT	OR	ON	2005/12/01 13:49
S19	67	((Red adj (recombinase or recombination) adj system) or (lambda-Red adj (recombinase or recombination) adj system) or (lambda adj Red adj(recombinase or recombination) adj system) or (lambda-Red adj helper adj plasmid) or (lambda adj Red adj helper adj plasmid) or (lambda-Red adj system) or (lambda adj Red adj system) or pKD46)	US-PGPUB; USPAT	OR	ON	2005/12/01 13:50
S20	30	S19 and @ad<="20021219"	US-PGPUB; USPAT	OR	ON	2005/12/01 10:32
S21	25	S20 and ((site-specific adj recombinase) or (site adj specific adj recombinase) or Cre/lox or flippase or Flp or Xer/dif or Int/att)	US-PGPUB; USPAT	OR	ON	2005/12/01 12:13
S22	2029	bacteria$2 and (chromosom$2 adj (engineering or integration))	US-PGPUB; USPAT	OR	ON	2005/12/01 13:47
S23	1476	S22 and @ad<="20021219"	US-PGPUB; USPAT	OR	ON	2005/12/01 10:32
S24	0	S23 and S21	US-PGPUB; USPAT	OR	ON	2005/12/01 12:18
S25	25	S21 and ((selectable adj marker) or (kanamycin adj select$4 adj marker) or (antibiotic adj select$4 adj marker) or (enzyme adj select$4 adj marker) or (antibiotic adj resistance adj marker) or (enzymatic adj marker))	US-PGPUB; USPAT	OR	ON	2005/12/01 13:52
S26	3	S23 and (recombination adj proficient adj host)	US-PGPUB; USPAT	OR	ON	2005/12/01 12:16
S27	0	S25 and (recombination adj proficient adj host)	US-PGPUB; USPAT	OR	ON	2005/12/01 10:48

S28	25	S25 ANd (express$4 DNA adj fragment) and ((regulatory near element) or promoter or orf or (open adj reading adj frame))	US-PGPUB; USPAT	OR	ON	2005/12/01 13:53
S29	25	S25 ANd ((express$4 DNA adj fragment) and ((regulatory near element) or promoter or orf or (open adj reading adj frame)))	US-PGPUB; USPAT	OR	ON	2005/12/01 12:19
S30	0	S25 ANd (first adj chromosom$2 adj (region or site))	US-PGPUB; USPAT	OR	ON	2005/12/01 10:52
S31	0	bacteria$2 and (chromosom$2 adj (engineering or integration)) and (inter-operon adj chromasom$2 adj integration adj (site or region))	US-PGPUB; USPAT	OR	ON	2005/12/01 12:06
S32	0	(inter-operon adj chromasom$2 adj integration adj (site or region))	US-PGPUB; USPAT	OR	ON	2005/12/01 12:06
S33	0	S25 and (chromasom$2 adj integration adj (site or region))	US-PGPUB; USPAT	OR	ON	2005/12/01 13:54
S34	25	S25 ANd (express$4 DNA adj fragment) and ((regulatory near element) or promoter or (phage adj promoter) or (bacterial adj promoter) or orf or (open adj reading adj frame))	US-PGPUB; USPAT	OR	ON	2005/12/01 12:21
S35	1	S26 and ((site-specific adj recombinase) or (site adj specific adj recombinase) or Cre/lox or flippase or Flp or Xer/dif or Int/att)	US-PGPUB; USPAT	OR	ON	2005/12/01 12:13
S36	0	S35 and S20	US-PGPUB; USPAT	OR	ON	2005/12/01 12:14
S37	1094	S23 and (Escherichia or salmonella or acinetobactor or methylomonas or bacillus or pseudomonas)	US-PGPUB; USPAT	OR	ON	2005/12/01 13:54
S38	30	S20 and (Escherichia or salmonella or acinetobactor or methylomonas or bacillus or pseudomonas)	US-PGPUB; USPAT	OR	ON	2005/12/01 12:17
S39	25	S38 and S21	US-PGPUB; USPAT	OR	ON	2005/12/01 12:18
S40	0	S39 and S23	US-PGPUB; USPAT	OR	ON	2005/12/01 12:20
S41	25	S39 ANd ((express$4 DNA adj fragment) and ((regulatory near element) or promoter or orf or (open adj reading adj frame)))	US-PGPUB; USPAT	OR	ON	2005/12/01 13:55
S42	0	S41 and S31	US-PGPUB; USPAT	OR	ON	2005/12/01 12:20
S43	0	S41 and S33	US-PGPUB; USPAT	OR	ON	2005/12/01 12:20

S44	0	(PCR adj generated adj recombination adj element)	US-PGPUB; USPAT	OR	ON	2005/12/01 13:56
S45	0	(PCR adj generated adj recombination adj element) or (amplified adj recombination adj element)	US-PGPUB; USPAT	OR	ON	2005/12/01 13:56
S46	2	S22 and S19 and ((first adj recombination adj (region or site)) and ((site-specific or (site adj specific)) adj recombinase) and (selectable adj marker) and (second adj recombination adj (region or site)) and (third adj recombination adj (region or site)))	US-PGPUB; USPAT	OR	ON	2005/12/01 13:56
S47	0	S46 and @ad<="20021219"	US-PGPUB; USPAT	OR	ON	2005/12/01 12:29

Dialog 10/734,936
11/1/05 LLM

```
Trying 31060000009999...Open

DIALOG INFORMATION SERVICES
PLEASE LOGON:
 ******** HHHHHHHH SSSSSSSS? ### Status: Signing onto Dialog ********
ENTER PASSWORD:
 ******** HHHHHHHH SSSSSSSS?  ********
### Status: Login successfulWelcome to DIALOG

Dialog level 05.08.04D

Last logoff:  30nov05 10:09:42
Logon file405 01dec05 12:33:45
           *** ANNOUNCEMENT ***
                    ***
--UPDATED: Important Notice to Freelance Authors--
See HELP FREELANCE for more information
                    ***
NEW FILES RELEASED
***Index Chemicus (File 302)
***Inspec (File 202)
***Physical Education Index (File 138)
***Computer and Information Systems Abstracts (File 56)
***Electronics and Communications Abstracts (File 57)
***Solid State and Superconductivity Abstracts (File 68)
***ANTE: Abstracts in New Technologies (File 60)
                    ***
RELOADS COMPLETED
*** The 2005 reload of the CLAIMS files (Files 340, 341, 942)
is now available online.

RESUMED UPDATING
***ERIC (File 1)
                    ***
Chemical Structure Searching now available in Prous Science Drug
Data Report (F452), Prous Science Drugs of the Future (F453),
IMS R&D Focus (F445/955), Pharmaprojects (F128/928), Beilstein
Facts (F390), Derwent Chemistry Resource (F355) and Index Chemicus
(File 302).
                    ***
     >>> Enter BEGIN HOMEBASE for Dialog Announcements <<<
     >>>    of new databases, price changes, etc.      <<<
                    ****
* * *
SYSTEM:HOME
Cost is in DialUnits
Menu System II: D2 version 1.7.9 term=ASCII
                      *** DIALOG HOMEBASE(SM) Main Menu ***

 Information:
  1.  Announcements (new files, reloads, etc.)
  2.  Database, Rates, & Command Descriptions
  3.  Help in Choosing Databases for Your Topic
  4.  Customer Services (telephone assistance, training, seminars, etc.)
  5.  Product Descriptions

 Connections:
  6.  DIALOG(R) Document Delivery
  7.  Data Star(R)

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```

```
      /H = Help            /L = Logoff          /NOMENU = Command Mode

Enter an option number to view information or to connect to an online
 service.  Enter a BEGIN command plus a file number to search a database
(e.g., B1 for ERIC).
?
Terminal set to DLINK
                    *** DIALOG HOMEBASE(SM) Main Menu ***

 Information:
  1.  Announcements (new files, reloads, etc.)
  2.  Database, Rates, & Command Descriptions
  3.  Help in Choosing Databases for Your Topic
  4.  Customer Services (telephone assistance, training, seminars, etc.)
  5.  Product Descriptions

 Connections:
  6.  DIALOG(R) Document Delivery
  7.  Data Star(R)

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      /H = Help            /L = Logoff          /NOMENU = Command Mode

Enter an option number to view information or to connect to an online
 service.  Enter a BEGIN command plus a file number to search a database
(e.g., B1 for ERIC).
? b biosci

>>>          44 is unauthorized
>>>          76 is unauthorized
>>>2 of the specified files are not available
       01dec05 12:33:53 User276741 Session D64.1
            $0.00    0.221 DialUnits FileHomeBase
     $0.00  Estimated cost FileHomeBase
     $0.03  TELNET
     $0.03  Estimated cost this search
     $0.03  Estimated total session cost   0.221 DialUnits


SYSTEM:OS  - DIALOG OneSearch
  File   5:Biosis Previews(R) 1969-2005/Nov W3
         (c) 2005 BIOSIS
  File  24:CSA Life Sciences Abstracts 1966-2005/Oct
         (c) 2005 CSA.
  File  28:Oceanic Abstracts 1966-2005/Oct
         (c) 2005 CSA.
  File  34:SciSearch(R) Cited Ref Sci 1990-2005/Nov W3
         (c) 2005 Inst for Sci Info
  File  35:Dissertation Abs Online 1861-2005/Nov
         (c) 2005 ProQuest Info&Learning
  File  40:Enviroline(R) 1975-2005/Jul
  File  41:Pollution Abstracts 1966-2005/Oct
         (c) 2005 CSA.
  File  50:CAB Abstracts 1972-2005/Oct
         (c) 2005 CAB International
  File  65:Inside Conferences 1993-2005/Nov W4
         (c) 2005 BLDSC all rts. reserv.
```

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  File  71:ELSEVIER BIOBASE 1994-2005/Nov W4
        (c) 2005  Elsevier Science B.V.
  File  73:EMBASE 1974-2005/Dec 01
        (c) 2005 Elsevier Science B.V.
  File  91:MANTIS(TM) 1880-2005/Jun
        2001 (c) Action Potential
  File  94:JICST-EPlus 1985-2005/Sep W4
        (c)2005 Japan Science and Tech Corp(JST)
  File  98:General Sci Abs/Full-Text 1984-2004/Dec
        (c) 2005 The HW Wilson Co.
  File 110:WasteInfo 1974-2002/Jul
        (c)  2002 AEA Techn Env.
*File 110: This file is closed (no updates)
  File 135:NewsRx Weekly Reports 1995-2005/Nov W3
        (c) 2005 NewsRx
*File 135: Please see HELP NEWS135 for information on select
journal titles.
  File 136:BioEngineering Abstracts-1966-2005/Oct (c) 2005 CSA.
  File 143:Biol. & Agric. Index 1983-2005/Sep
        (c) 2005 The HW Wilson Co
  File 144:Pascal 1973-2005/Nov W3
        (c) 2005 INIST/CNRS
  File 155:MEDLINE(R) 1951-2005/Nov 30
        (c) format only 2005 Dialog
*File 155: Completed records will cease to update on 16 November.      e
Please see HELP NEWS 154 for details.
  File 164:Allied & Complementary Medicine 1984-2005/Dec
        (c) 2005 BLHCIS
  File 172:EMBASE Alert 2005/Dec 01
        (c) 2005 Elsevier Science B.V.
  File 185:Zoological Record Online(R) 1978-2005/Dec
        (c) 2005 BIOSIS
  File 357:Derwent Biotech Res. _1982-2005/Dec W1
        (c) 2005 Thomson Derwent & ISI
  File 369:New Scientist 1994-2005/Jul W5
        (c) 2005 Reed Business Information Ltd.
  File 370:Science 1996-1999/Jul W3
        (c) 1999 AAAS
*File 370: This file is closed (no updates). Use File 47 for more current
information.
  File 391:Beilstein Reactions 2005/Q2
        (c) 2005 Beilstein GmbH
  File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
        (c) 1998 Inst for Sci Info
  File 467:ExtraMED(tm) 2000/Dec
        (c) 2001 Informania Ltd.
*File 467: F467 no longer updates; see Help News467.                  7.

      Set  Items  Description
      ---  -----  -----------
? s (triple (w) homologous (w) recombination)
          193951  TRIPLE
          514350  HOMOLOGOUS
          376085  RECOMBINATION
      S1       0  (TRIPLE (W) HOMOLOGOUS (W) RECOMBINATION)
?   s (chromosom?? (w) (engineering or integration))
         1618678  CHROMOSOM??
         1872672  ENGINEERING
          498205  INTEGRATION
      S2    4067  (CHROMOSOM?? (W) (ENGINEERING OR INTEGRATION))
? not pd>021211
```

```
>>>Unrecognizable Command
? s s2 not pd>021211
>>>One or more prefixes are unsupported
>>>  or undefined in one or more files.
           4067  S2
        7891954  PD>021211
      S3    3526  S2 NOT PD>021211
? s s3 and ((triple or multiple) (w) homologous (w) recombination)
           3526  S3
         193951  TRIPLE
        2748652  MULTIPLE
         514350  HOMOLOGOUS
         376085  RECOMBINATION
              5  (TRIPLE OR MULTIPLE)(W)HOMOLOGOUS(W)RECOMBINATION
      S4      0  S3 AND ((TRIPLE OR MULTIPLE) (W) HOMOLOGOUS (W)
                 RECOMBINATION)
? s  (( multiple) (w) homologous (w) recombination)
        2748652  MULTIPLE
         514350  HOMOLOGOUS
         376085  RECOMBINATION
      S5      5  (( MULTIPLE) (W) HOMOLOGOUS (W) RECOMBINATION)
? s s5 not pd>021219
>>>One or more prefixes are unsupported
>>>  or undefined in one or more files.
              5  S5
        7876707  PD>021219
      S6      2  S5 NOT PD>021219
? rd
>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set.
...completed examining records
      S7      1  RD (unique items)
? type s7/free

 7/8/1     (Item 1 from file: 5)
0015590675   BIOSIS NO.: 200510285175
Spontaneous homologous recombination is induced by collapsed replication
  forks that are caused by endogenous DNA single-strand breaks
2005
? s ((Red (w)(recombinase or recombination) (w) system) or (lambda-Red (w)
(recombinase or recombination) (w) system) or (lambda (w) Red (w)(recombinase
or recombination) (w) system) or (lambda-Red (w) helper (w) plasmid) or
(lambda (w) Red (w) helper (w) plasmid) or (lambda-Red (w) system) or (lambda
(w) Red (w) system) or pKD46)
Processing
Processed  10 of  29 files ...
Completed processing all files
        1229273  RED
          18918  RECOMBINASE
         376085  RECOMBINATION
       19907844  SYSTEM
             62  RED(W)(RECOMBINASE OR RECOMBINATION)(W)SYSTEM
              2  LAMBDA-RED
          18918  RECOMBINASE
         376085  RECOMBINATION
       19907844  SYSTEM
              0  LAMBDA-RED(W)(RECOMBINASE OR RECOMBINATION)(W)SYSTEM
         379181  LAMBDA
        1229273  RED
          18918  RECOMBINASE
```

```
          376085  RECOMBINATION
        19907844  SYSTEM
              36  LAMBDA(W)RED(W)(RECOMBINASE OR RECOMBINATION)(W)SYSTEM
               2  LAMBDA-RED
          185593  HELPER
          490128  PLASMID
               0  LAMBDA-RED(W)HELPER(W)PLASMID
          379181  LAMBDA
         1229273  RED
          185593  HELPER
          490128  PLASMID
               0  LAMBDA(W)RED(W)HELPER(W)PLASMID
               2  LAMBDA-RED
        19907844  SYSTEM
               0  LAMBDA-RED(W)SYSTEM
          379181  LAMBDA
         1229273  RED
        19907844  SYSTEM
              53  LAMBDA(W)RED(W)SYSTEM
              12  PKD46
      S8      124  ((RED (W)(RECOMBINASE OR RECOMBINATION) (W) SYSTEM) OR
                   (LAMBDA-RED (W) (RECOMBINASE OR RECOMBINATION) (W)
                   SYSTEM) OR (LAMBDA (W) RED (W)(RECOMBINASE OR
                   RECOMBINATION) (W) SYSTEM) OR (LAMBDA-RED (W) HELPER (W)
                   PLASMID) OR (LAMBDA (W) RED (W) HELPER (W) PLASMID) OR
                   (LAMBDA-RED (W) SYSTEM) OR (LAMBDA (W) RED (W) SYSTEM) OR
                   PKD46)
? s s8 not pd>021219
>>>One or more prefixes are unsupported
>>>  or undefined in one or more files.
              124  S8
          7876707  PD>021219
      S9       73  S8 NOT PD>021219
? s s9 and ((site-specific (w) recombinase) or (site (w) specific (w)
recombinase) or Cre/lox or flippase or Flp or  Xer/dif or Int/att)
>>>Term "LOX" is not defined in one or more files
>>>Term "DIF" is not defined in one or more files
>>>Term "ATT" is not defined in one or more files
               73  S9
             5664  SITE-SPECIFIC
            18918  RECOMBINASE
                0  SITE-SPECIFIC(W)RECOMBINASE
          3085655  SITE
          5875582  SPECIFIC
            18918  RECOMBINASE
             1773  SITE(W)SPECIFIC(W)RECOMBINASE
            30620  CRE/LOX
              960  FLIPPASE
             4527  FLP
              604  XER/DIF
            77982  INT/ATT
     S10        2  S9 AND ((SITE-SPECIFIC (W) RECOMBINASE) OR (SITE (W)
                   SPECIFIC (W) RECOMBINASE) OR CRE/LOX OR FLIPPASE OR FLP
                   OR  XER/DIF OR INT/ATT)
? s s9 and ((site-specific (w) recombinase) or (site (w) specific (w)
recombinase) or (Cre(w)lox) or flippase or Flp or  (Xer(w) dif) or (Int(w)
att))
               73  S9
             5664  SITE-SPECIFIC
            18918  RECOMBINASE
                0  SITE-SPECIFIC(W)RECOMBINASE
```

```
        3085655  SITE
        5875582  SPECIFIC
          18918  RECOMBINASE
           1773  SITE(W)SPECIFIC(W)RECOMBINASE
          30620  CRE
          11299  LOX
           1785  CRE(W)LOX
            960  FLIPPASE
           4527  FLP
            604  XER
           5070  DIF
              2  XER(W)DIF
          77982  INT
          13685  ATT
             20  INT(W)ATT
    S11       1  S9 AND ((SITE-SPECIFIC (W) RECOMBINASE) OR (SITE (W)
                 SPECIFIC (W) RECOMBINASE) OR (CRE(W)LOX) OR FLIPPASE OR
                 FLP OR  (XER(W) DIF) OR (INT(W) ATT))
? type s10/medium,k

 10/K/1     (Item 1 from file: 5)
DIALOG(R)File   5:Biosis Previews(R)
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0015480514   BIOSIS NO.: 200510175014
Deletion of clpP in chromosome of E-coli by red recombination
AUTHOR: Bai Guang-Xing; Sun Zhi-Wei; Huang Ying; Yu Wei-Yuan (Reprint)
AUTHOR ADDRESS: Acad Mil Med Sci, Inst Biotechnol, Beijing 100071, Peoples
  R China**Peoples R China
AUTHOR E-MAIL ADDRESS: Yuwy@nic.bmi.ac.cn
JOURNAL: Zhongguo Shengwu Huaxue yu Fenzi Shengwu Xuebao  21 (1): p35-38
FEB 20 2005 2005
ISSN: 1007-7626
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: Chinese

ABSTRACT: Plasmid  pKD46  can express three proteins: Gam, Bet and Exo. Gam
  inhibits the host RecBCD exonuclease V...

...that Bet and Exo can gain access to DNA ends to promote recombination.
  BW25113 with  pKD46  has the function of recombination when induced by
  L-arabinose. PCR products were obtained by...

...The chloramphenicol resistance gene was then eliminated by using a
  helper plasmid, pCP20, encoding the  Flp  recombinase. Using this system,
  ClpP gene in chromosome of Escherichia coli was deleted.
DESCRIPTORS:
  CHEMICALS & BIOCHEMICALS:   ... Flp  recombinase...

... pKD46 --
? type s10/medium,k/2

 10/K/2     (Item 2 from file: 5)
DIALOG(R)File   5:Biosis Previews(R)
(c) 2005 BIOSIS. All rts. reserv.

0014794154   BIOSIS NO.: 200400161495
Rapid generation of sequence specific germline modifications in mice.
AUTHOR: Zhou Dewang (Reprint); Ren Jinxiang (Reprint); Ryan Thomas M
```

(Reprint); Townes Tim M (Reprint)
AUTHOR ADDRESS: Dept. of Biochemistry and Molecular Genetics, University of Alabama at Birmingham, Birmingham, AL, USA**USA
JOURNAL: Blood 102 (11): p37b November 16, 2003 2003
MEDIUM: print
CONFERENCE/MEETING: 45th Annual Meeting of the American Society of Hematology San Diego, CA, USA December 06-09, 2003; 20031206
SPONSOR: American Society of Hematology
ISSN: 0006-4971
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: end of the EKLF gene in an EKLF BAC clone by homologous recombination using the **lambda red system** in E. coli DY380. An 18.3 kb targeting vector containing the EGFP/loxP-PGK...

...after 8 days of selection and analyzed for homologous recombination by PCR. Transient expression of **Cre** recombinase in correctly targeted ES cell clones was used to remove the floxed PGK/Neo...
DESCRIPTORS:
CHEMICALS & BIOCHEMICALS: **Cre** recombinase...
? type s11/medium,k

11/K/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2005 BIOSIS. All rts. reserv.

0015480514 BIOSIS NO.: 200510175014
Deletion of clpP in chromosome of E-coli by red recombination
AUTHOR: Bai Guang-Xing; Sun Zhi-Wei; Huang Ying; Yu Wei-Yuan (Reprint)
AUTHOR ADDRESS: Acad Mil Med Sci, Inst Biotechnol, Beijing 100071, Peoples R China**Peoples R China
AUTHOR E-MAIL ADDRESS: Yuwy@nic.bmi.ac.cn
JOURNAL: Zhongguo Shengwu Huaxue yu Fenzi Shengwu Xuebao 21 (1): p35-38 FEB 20 2005 2005
ISSN: 1007-7626
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: Chinese

ABSTRACT: Plasmid **pKD46** can express three proteins: Gam, Bet and Exo. Gam inhibits the host RecBCD exonuclease V...

...that Bet and Exo can gain access to DNA ends to promote recombination. BW25113 with **pKD46** has the function of recombination when induced by L-arabinose. PCR products were obtained by...

...The chloramphenicol resistance gene was then eliminated by using a helper plasmid, pCP20, encoding the **Flp** recombinase. Using this system, ClpP gene in chromosome of Escherichia coli was deleted.
DESCRIPTORS:
CHEMICALS & BIOCHEMICALS: ... **Flp** recombinase...

... **pKD46** --
? ds

Set	Items	Description
S1	0	(TRIPLE (W) HOMOLOGOUS (W) RECOMBINATION)
S2	4067	(CHROMOSOM?? (W) (ENGINEERING OR INTEGRATION))

```
S3       3526   S2 NOT PD>021211
S4          0   S3 AND ((TRIPLE OR MULTIPLE) (W) HOMOLOGOUS (W) RECOMBINAT-
              ION)
S5          5   (( MULTIPLE) (W) HOMOLOGOUS (W) RECOMBINATION)
S6          2   S5 NOT PD>021219
S7          1   RD (unique items)
S8        124   ((RED (W)(RECOMBINASE OR RECOMBINATION) (W) SYSTEM) OR (LA-
              MBDA-RED (W) (RECOMBINASE OR RECOMBINATION) (W) SYSTEM) OR (L-
              AMBDA (W) RED (W)(RECOMBINASE OR RECOMBINATION) (W) SYSTEM) OR
               (LAMBDA-RED (W) HELPER (W) PLASMID) OR (LAMBDA (W) RED (W) H-
              ELPER (W) PLA
S9         73   S8 NOT PD>021219
S10         2   S9 AND ((SITE-SPECIFIC (W) RECOMBINASE) OR (SITE (W) SPECI-
              FIC (W) RECOMBINASE) OR CRE/LOX OR FLIPPASE OR FLP OR  XER/DIF
               OR INT/ATT)
S11         1   S9 AND ((SITE-SPECIFIC (W) RECOMBINASE) OR (SITE (W) SPECI-
              FIC (W) RECOMBINASE) OR (CRE(W)LOX) OR FLIPPASE OR FLP OR  (X-
              ER(W) DIF) OR (INT(W) ATT))
? s s8 and (bacteria?? and (chromosom?? (w) (engineering or integration)))
             124  S8
         4230988  BACTERIA??
         1618678  CHROMOSOM??
         1872672  ENGINEERING
          498205  INTEGRATION
            4067  CHROMOSOM??(W)(ENGINEERING OR INTEGRATION)
     S12       1  S8 AND (BACTERIA?? AND (CHROMOSOM?? (W) (ENGINEERING OR
                  INTEGRATION)))
?  type s12/medium,k

 12/K/1     (Item 1 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.
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0345211  DBR Accession No.: 2004-17503    PATENT
Directed integration of an expressible DNA fragment lacking a selectable
    marker into a  bacterial  chromosome comprises co-transforming
    recombination proficient host with at least two linear recombination
    elements - DNA fragment integration via recombination for use in
    biosynthetic pathway engineering
AUTHOR: SUH W
PATENT ASSIGNEE: DU PONT DE NEMOURS and CO E I  2004
PATENT NUMBER: WO 200456973  PATENT DATE: 20040708  WPI ACCESSION NO.:
    2004-507710  (200448)
PRIORITY APPLIC. NO.: US 434602  APPLIC. DATE: 20021219
NATIONAL APPLIC. NO.: WO 2003US41810  APPLIC. DATE: 20031219
LANGUAGE: English

Directed integration of an expressible DNA fragment lacking a selectable
    marker into a  bacterial  chromosome comprises co-transforming
    recombination proficient host with at least two linear recombination
    elements - DNA...
...ABSTRACT: ABSTRACT: NOVELTY - Directed integration of an expressible DNA
     fragment  lacking  a  selectable  marker into a bacterial chromosome
    comprises  co-transforming  recombination proficient host with at least
    two linear recombination elements, is...

... DETAILED  DESCRIPTION  -  Directed  integration  of  an expressible DNA
     fragment  lacking  a  selectable  marker into a bacterial chromosome
    comprises  co-transforming  recombination proficient host with at least
    two linear recombination elements: (a...
```

... RR3 is a third recombination of about 10-50 bases; (c) providing a recombination proficient **bacterial** host harboring a **lambda - Red recombinase system** , having a **bacterial** chromosome comprising: (i) a first chromosomal region having homology to the first recombination region; (ii...

... host with the first and second recombination elements, where both elements are integrated into the **bacterial** chromosome between the first and second chromosomal regions forming a construct having the general structure...

...is excised from the chromosome and where the expressible DNA fragment is inserted into the **bacterial** chromosome lacking the selectable marker. BIOTECHNOLOGY - Preferred Method: In the directed integration of an expressible DNA fragment lacking a selectable marker into a **bacterial** chromosome, either the first or second expressible DNA fragment is selected from regulatory elements, promoters...

... by a gene residing on a plasmid. The first chromosomal region is upstream of a **bacterial** promoter or of an inter-operon **chromosomal integration** site. The expressible DNA fragment is a promoter selected from **bacterial** and phage promoters. The promoter comprises positive and negative regulatory sites for control of a...

... resistance markers, enzymatic markers and amino acid biosynthesis enzymes. The recombination proficient host harboring a **lambda - Red recombinase system** is selected from Escherichia, Salmonella, Acinetobacter, Methylomonas, Bacillus and Pseudomonas. The recombination sites are selected...

... and are about 25-4000 bases. Alternatively, integrating a foreign promoter in place of a **bacterial** chromosomal promoter in a recombination proficient host cell or integrating an unlinked foreign promoter and foreign open reading frame into a **bacterial** chromosome in a recombination proficient host cell comprises: (a) providing at least one first recombination...

... RR3 is a third recombination of about 10-50 bases; (c) providing a recombination proficient **bacterial** host harboring a **lambda - Red recombinase system** having a **bacterial** chromosome comprising: (i) a first chromosomal region upstream of a **bacterial** promoter having homology to the first recombination region; (ii) a second chromosomal region downstream of the **bacterial** promoter having homology to the third recombination region; (d) transforming the recombination proficient host with the first and second recombination elements, where both elements are integrated into the **bacterial** chromosome between the first and second chromosomal regions forming a construct having the general structure...

... marker is excised from the chromosome and where the foreign promoter is inserted into the **bacterial** chromosome in place of the **bacterial** promoter. The steps (d)-(f) are repeated one or more times. USE - The method is...

DESCRIPTORS: expressible DNA fragment integration, bacterium chromosome, co-transforming recombination proficient host, linear recombination element, **lambda - red recombinase system** , selectable marker, appl. multiple chromosome modification, biosynth. pathway engineering, material prep. (23, 37)

? s s8 and ((selectable (w) marker) or (kanamycin (w) select???? (w) marker)

```
or (antibiotic (w) select???? (w) marker) or (enzyme (w) select???? (w)
marker) or (antibiotic (w) resistance (w) marker) or (enzymatic (w) marker))
Processing
Processed  10 of  29 files ...
Processing
Processed  20 of  29 files ...
Completed processing all files
            124  S8
          30062  SELECTABLE
         925783  MARKER
          19409  SELECTABLE(W)MARKER
          56216  KANAMYCIN
        4890035  SELECT????
         925783  MARKER
             18  KANAMYCIN(W)SELECT????(W)MARKER
         738157  ANTIBIOTIC
        4890035  SELECT????
         925783  MARKER
             49  ANTIBIOTIC(W)SELECT????(W)MARKER
        4110562  ENZYME
        4890035  SELECT????
         925783  MARKER
             37  ENZYME(W)SELECT????(W)MARKER
         738157  ANTIBIOTIC
        2811905  RESISTANCE
         925783  MARKER
            832  ANTIBIOTIC(W)RESISTANCE(W)MARKER
         690101  ENZYMATIC
         925783  MARKER
            484  ENZYMATIC(W)MARKER
    S13       7  S8 AND ((SELECTABLE (W) MARKER) OR (KANAMYCIN (W)
                 SELECT???? (W) MARKER) OR (ANTIBIOTIC (W) SELECT???? (W)
                 MARKER) OR (ENZYME (W) SELECT???? (W) MARKER) OR
                 (ANTIBIOTIC (W) RESISTANCE (W) MARKER) OR (ENZYMATIC (W)
                 MARKER))
? rd
>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set.
...completed examining records
    S14       5  RD (unique items)
? ds

Set     Items   Description
S1          0   (TRIPLE (W) HOMOLOGOUS (W) RECOMBINATION)
S2       4067   (CHROMOSOM?? (W) (ENGINEERING OR INTEGRATION))
S3       3526   S2 NOT PD>021211
S4          0   S3 AND ((TRIPLE OR MULTIPLE) (W) HOMOLOGOUS (W) RECOMBINAT-
              ION)
S5          5   (( MULTIPLE) (W) HOMOLOGOUS (W) RECOMBINATION)
S6          2   S5 NOT PD>021219
S7          1   RD (unique items)
S8        124   ((RED (W)(RECOMBINASE OR RECOMBINATION) (W) SYSTEM) OR (LA-
              MBDA-RED (W) (RECOMBINASE OR RECOMBINATION) (W) SYSTEM) OR (L-
              AMBDA (W) RED (W)(RECOMBINASE OR RECOMBINATION) (W) SYSTEM) OR
               (LAMBDA-RED (W) HELPER (W) PLASMID) OR (LAMBDA (W) RED (W) H-
              ELPER (W) PLA
S9         73   S8 NOT PD>021219
S10         2   S9 AND ((SITE-SPECIFIC (W) RECOMBINASE) OR (SITE (W) SPECI-
              FIC (W) RECOMBINASE) OR CRE/LOX OR FLIPPASE OR FLP OR  XER/DIF
               OR INT/ATT)
```

```
S11          1   S9 AND ((SITE-SPECIFIC (W) RECOMBINASE) OR (SITE (W) SPECI-
                 FIC (W) RECOMBINASE) OR (CRE(W)LOX) OR FLIPPASE OR FLP OR  (X-
                 ER(W) DIF) OR (INT(W) ATT))
S12          1   S8 AND (BACTERIA?? AND (CHROMOSOM?? (W) (ENGINEERING OR IN-
                 TEGRATION)))
S13          7   S8 AND ((SELECTABLE (W) MARKER) OR (KANAMYCIN (W) SELECT??-
                 ?? (W) MARKER) OR (ANTIBIOTIC (W) SELECT???? (W) MARKER) OR (-
                 ENZYME (W) SELECT???? (W) MARKER) OR (ANTIBIOTIC (W) RESISTAN-
                 CE (W) MARKER) OR (ENZYMATIC (W) MARKER))
S14          5   RD (unique items)
? s s10 and s14
                2  S10
                5  S14
     S15        0  S10 AND S14
? s s2 and ((site-specific (w) recombinase) or (site (w) specific (w)
recombinase) or (Cre(w)lox) or flippase or Flp or  (Xer(w) dif) or (Int(w)
att))
             4067  S2
             5664  SITE-SPECIFIC
            18918  RECOMBINASE
                0  SITE-SPECIFIC(W)RECOMBINASE
          3085655  SITE
          5875582  SPECIFIC
            18918  RECOMBINASE
             1773  SITE(W)SPECIFIC(W)RECOMBINASE
            30620  CRE
            11299  LOX
             1785  CRE(W)LOX
              960  FLIPPASE
             4527  FLP
              604  XER
             5070  DIF
                2  XER(W)DIF
            77982  INT
            13685  ATT
               20  INT(W)ATT
     S16       79  S2 AND ((SITE-SPECIFIC (W) RECOMBINASE) OR (SITE (W)
                   SPECIFIC (W) RECOMBINASE) OR (CRE(W)LOX) OR FLIPPASE OR
                   FLP OR  (XER(W) DIF) OR (INT(W) ATT))
? s s16 not pd>021219
>>>One or more prefixes are unsupported
>>>  or undefined in one or more files.
               79  S16
          7876707  PD>021219
     S17       70  S16 NOT PD>021219
? s s17 and ((selectable (w) marker) or (kanamycin (w) select???? (w) marker)
or (antibiotic (w) select???? (w) marker) or (enzyme (w) select???? (w)
marker) or (antibiotic (w) resistance (w) marker) or (enzymatic (w) marker))
Processing
Processed  10 of  29 files ...
Processed  20 of  29 files ...
Processing
Completed processing all files
               70  S17
            30062  SELECTABLE
           925783  MARKER
            19409  SELECTABLE(W)MARKER
            56216  KANAMYCIN
          4890035  SELECT????
           925783  MARKER
               18  KANAMYCIN(W)SELECT????(W)MARKER
```

```
         738157  ANTIBIOTIC
        4890035  SELECT????
         925783  MARKER
             49  ANTIBIOTIC(W)SELECT????(W)MARKER
        4110562  ENZYME
        4890035  SELECT????
         925783  MARKER
             37  ENZYME(W)SELECT????(W)MARKER
         738157  ANTIBIOTIC
        2811905  RESISTANCE
         925783  MARKER
            832  ANTIBIOTIC(W)RESISTANCE(W)MARKER
         690101  ENZYMATIC
         925783  MARKER
            484  ENZYMATIC(W)MARKER
     S18     11  S17 AND ((SELECTABLE (W) MARKER) OR (KANAMYCIN (W)
                 SELECT???? (W) MARKER) OR (ANTIBIOTIC (W) SELECT???? (W)
                 MARKER) OR (ENZYME (W) SELECT???? (W) MARKER) OR
                 (ANTIBIOTIC (W) RESISTANCE (W) MARKER) OR (ENZYMATIC (W)
                 MARKER))
? rd
>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set.
...completed examining records
     S19       8  RD (unique items)
? s s19 and (express???? DNA (w) fragment) and ((regulatory (n)element) or
promoter or (phage (w) promoter) or (bacterial (w) promoter) or orf or (open
(w) reading (w) frame))
Sending Break...
?s s19 and ((express???? DNA (w) fragment) and ((regulatory (n)element) or
promoter or (phage (w) promoter) or (bacterial (w) promoter) or orf or (open
(w) reading (w) frame)))
Processed  20 of  29 files ...
Processing
Completed processing all files
             8  S19
             0  EXPRESS???? DNA
        751917  FRAGMENT
             0  EXPRESS???? DNA(W)FRAGMENT
        896392  REGULATORY
       2185028  ELEMENT
         44217  REGULATORY(N)ELEMENT
        756927  PROMOTER
        191542  PHAGE
        756927  PROMOTER
           555  PHAGE(W)PROMOTER
       2139028  BACTERIAL
        756927  PROMOTER
           800  BACTERIAL(W)PROMOTER
         54671  ORF
       1255108  OPEN
        411191  READING
        381651  FRAME
        154581  OPEN(W)READING(W)FRAME
     S20     0  S19 AND ((EXPRESS???? DNA (W) FRAGMENT) AND ((REGULATORY
                 (N)ELEMENT) OR PROMOTER OR (PHAGE (W) PROMOTER) OR
                 (BACTERIAL (W) PROMOTER) OR ORF OR (OPEN (W) READING (W)
                 FRAME)))
?  type s19/free/all
```

19/8/1 (Item 1 from file: 5)
0012355878 BIOSIS NO.: 200000074191
Chromosomal integration **of heterologous DNA in Escherichia coli with precise removal of markers and replicons used during construction**
1999

19/8/2 (Item 1 from file: 34)
DIALOG(R)File 34:(c) 2005 Inst for Sci Info. All rts. reserv.

10571180 Genuine Article#: 543EJ Number of References: 27
Title: Towards a Cre-based recombination system for generating integrated DNA repertoires site-specifically in yeast (ABSTRACT AVAILABLE)
Publication date: 20020500
Journal Subject Category: BIOTECHNOLOGY & APPLIED MICROBIOLOGY
Descriptors--Author Keywords: **chromosome engineering** ; Cre recombinase ; directed evolution ; lox sites ; Saccharomyces cerevisiae
Identifiers--KeyWord Plus(R): MUTANT LOX SITES; SACCHAROMYCES-CEREVISIAE; GENE DISRUPTIONS; GENOME; MUTAGENESIS; EXPRESSION; CASSETTE; STRATEGY; PROTEIN; STRAINS

19/8/3 (Item 2 from file: 34)
DIALOG(R)File 34:(c) 2005 Inst for Sci Info. All rts. reserv.

08091955 Genuine Article#: 245XV Number of References: 19
Title: Site-specific chromosomal integration **in mammalian cells: Highly efficient CRE recombinase-mediated cassette exchange** (ABSTRACT AVAILABLE)
Publication date: 19991001
Journal Subject Category: BIOCHEMISTRY & MOLECULAR BIOLOGY
Descriptors--Author Keywords: recombinase ; **CRE / Lox** ; gene transfer ; RMCE ; **chromosomal integration**
Identifiers--KeyWord Plus(R): LOXP SPACER REGION; **FLP** -RECOMBINASE; ACTIVATION; GENOME

19/8/4 (Item 3 from file: 34)
DIALOG(R)File 34:(c) 2005 Inst for Sci Info. All rts. reserv.

07867163 Genuine Article#: 217DA Number of References: 27
Title: Genome engineering of Toxoplasma gondii using the site - specific recombinase **Cre** (ABSTRACT AVAILABLE)
Publication date: 19990708
Journal Subject Category: GENETICS & HEREDITY
Descriptors--Author Keywords: apicomplexan parasite ; excision ; site-specific **chromosomal integration** ; transformation
Identifiers--KeyWord Plus(R): EMBRYONIC STEM-CELLS; GENE REPLACEMENT; MAMMALIAN-CELLS; IN-VITRO; MICE; IDENTIFICATION; EXPRESSION; INDUCTION; PROTEIN; MARKER

19/8/5 (Item 1 from file: 50)
DIALOG(R)File 50:(c) 2005 CAB International. All rts. reserv.

0007103046 CAB Accession Number: 19950110363
A site-directed chromosomal translocation induced in embryonic stem cells by Cre - lox **P recombination.**
Publication Year: 1995

DESCRIPTORS: recombination; targeted mutagenesis; gene transfer; chromosome translocation; embryonic stem cells; biotechnology
ORGANISM DESCRIPTORS: mice
BROADER TERMS: Muridae; rodents; mammals; vertebrates; Chordata; animals; small mammals
CABICODES: Biotechnology (General), (Revised June 2002) (WW000); Animal Genetics, (Discontinued March 2000) (LL220); Laboratory Animal Science (LL040)

19/8/6 (Item 1 from file: 98)
DIALOG(R)File 98:(c) 2005 The HW Wilson Co. All rts. reserv.

04273997 H.W. WILSON RECORD NUMBER: BGSA00023997 (USE FORMAT 7 FOR FULLTEXT)

Recent developments in molecular genetics of Candida albicans.
WORD COUNT: 16377

DESCRIPTORS:
Candida albicans; Fungal genetics; Molecular genetics
2000 (20000000)

19/8/7 (Item 1 from file: 357)
0316972 DBR Accession No.: 2003-18112
Site-specific recombination for genetic engineering in plants - transgenic plant construction via site-specific recombinanation, a review 2003

19/8/8 (Item 2 from file: 357)
0288720 DBR Accession No.: 2002-10567
Obtaining site-specific gene replacement, useful for obtaining specific and stable integration of nucleic acids into chromosomes of eukaryotes, by employing irreversible recombination sites (IRS) and irreversible recombinases - homologous recombination useful for generating transgenic plant 2002
? ds

Set	Items	Description
S1	0	(TRIPLE (W) HOMOLOGOUS (W) RECOMBINATION)
S2	4067	(CHROMOSOM?? (W) (ENGINEERING OR INTEGRATION))
S3	3526	S2 NOT PD>021211
S4	0	S3 AND ((TRIPLE OR MULTIPLE) (W) HOMOLOGOUS (W) RECOMBINATION)
S5	5	((MULTIPLE) (W) HOMOLOGOUS (W) RECOMBINATION)
S6	2	S5 NOT PD>021219
S7	1	RD (unique items)
S8	124	((RED (W)(RECOMBINASE OR RECOMBINATION) (W) SYSTEM) OR (LAMBDA-RED (W) (RECOMBINASE OR RECOMBINATION) (W) SYSTEM) OR (LAMBDA (W) RED (W)(RECOMBINASE OR RECOMBINATION) (W) SYSTEM) OR (LAMBDA-RED (W) HELPER (W) PLASMID) OR (LAMBDA (W) RED (W) HELPER (W) PLA
S9	73	S8 NOT PD>021219
S10	2	S9 AND ((SITE-SPECIFIC (W) RECOMBINASE) OR (SITE (W) SPECIFIC (W) RECOMBINASE) OR CRE/LOX OR FLIPPASE OR FLP OR XER/DIF OR INT/ATT)
S11	1	S9 AND ((SITE-SPECIFIC (W) RECOMBINASE) OR (SITE (W) SPECIFIC (W) RECOMBINASE) OR (CRE(W)LOX) OR FLIPPASE OR FLP OR (XER(W) DIF) OR (INT(W) ATT))

```
S12          1   S8 AND (BACTERIA?? AND (CHROMOSOM?? (W) (ENGINEERING OR IN-
              TEGRATION)))
S13          7   S8 AND ((SELECTABLE (W) MARKER) OR (KANAMYCIN (W) SELECT??-
              ?? (W) MARKER) OR (ANTIBIOTIC (W) SELECT???? (W) MARKER) OR (-
              ENZYME (W) SELECT???? (W) MARKER) OR (ANTIBIOTIC (W) RESISTAN-
              CE (W) MARKER) OR (ENZYMATIC (W) MARKER))
S14          5   RD (unique items)
S15          0   S10 AND S14
S16         79   S2 AND ((SITE-SPECIFIC (W) RECOMBINASE) OR (SITE (W) SPECI-
              FIC (W) RECOMBINASE) OR (CRE(W)LOX) OR FLIPPASE OR FLP OR  (X-
              ER(W) DIF) OR (INT(W) ATT))
S17         70   S16 NOT PD>021219
S18         11   S17 AND ((SELECTABLE (W) MARKER) OR (KANAMYCIN (W) SELECT?-
              ??? (W) MARKER) OR (ANTIBIOTIC (W) SELECT???? (W) MARKER) OR -
              (ENZYME (W) SELECT???? (W) MARKER) OR (ANTIBIOTIC (W) RESISTA-
              NCE (W) MARKER) OR (ENZYMATIC (W) MARKER))
S19          8   RD (unique items)
S20          0   S19 AND ((EXPRESS???? DNA (W) FRAGMENT) AND ((REGULATORY (-
              N)ELEMENT) OR PROMOTER OR (PHAGE (W) PROMOTER) OR (BACTERIAL -
              (W) PROMOTER) OR ORF OR (OPEN (W) READING (W) FRAME)))
? s 19 and (bacteria?? and (chromosom?? (w) (engineering or integration)))
         1924582  19
         4230988  BACTERIA??
         1618678  CHROMOSOM??
         1872672  ENGINEERING
          498205  INTEGRATION
            4067  CHROMOSOM??(W)(ENGINEERING OR INTEGRATION)
     S21      36  19 AND (BACTERIA?? AND (CHROMOSOM?? (W) (ENGINEERING OR
                  INTEGRATION)))
? s s19 and (bacteria?? and (chromosom?? (w) (engineering or integration)))
               8  S19
         4230988  BACTERIA??
         1618678  CHROMOSOM??
         1872672  ENGINEERING
          498205  INTEGRATION
            4067  CHROMOSOM??(W)(ENGINEERING OR INTEGRATION)
     S22       2  S19 AND (BACTERIA?? AND (CHROMOSOM?? (W) (ENGINEERING OR
                  INTEGRATION)))
? rd
>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set.
...completed examining records
     S23       2  RD (unique items)
? type s23/free/1-2

 23/8/1     (Item 1 from file: 5)
0012355878   BIOSIS NO.: 200000074191
 Chromosomal   integration  of heterologous DNA in Escherichia coli with
  precise removal of markers and replicons used during construction
1999


 23/8/2     (Item 1 from file: 98)
DIALOG(R)File  98:(c) 2005 The HW Wilson Co. All rts. reserv.

04273997    H.W.  WILSON  RECORD  NUMBER:  BGSA00023997   (USE FORMAT 7 FOR
FULLTEXT)
Recent developments in molecular genetics of Candida albicans.
WORD COUNT:  16377
```

DESCRIPTORS:
Candida albicans; Fungal genetics; Molecular genetics
2000 (20000000)
? type s23/medium,k/1

23/K/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0012355878 BIOSIS NO.: 200000074191
Chromosomal integration **of heterologous DNA in Escherichia coli with precise removal of markers and replicons used during construction**
AUTHOR: Martinez-Morales F; Borges A C; Martinez A; Shanmugam K T; Ingram L O (Reprint)
AUTHOR ADDRESS: Dept. Micro. and Cell Science, University of Florida, Gainesville, FL, USA**USA
JOURNAL: Journal of Bacteriology 181 (22): p7143-7148 Nov., 1999 1999
MEDIUM: print
ISSN: 0021-9193
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

Chromosomal integration **of heterologous DNA in Escherichia coli with precise removal of markers and replicons used during...**

...ABSTRACT: a modified multiple cloning region for DNA insertion. After integration, a helper plasmid expressing the **flippase** (**FLP**) recombinase allows precise in vivo excision of the replicon and the marker used for selection...
DESCRIPTORS:
...BIOSYSTEMATIC NAMES: Facultatively Anaerobic Gram-Negative Rods, Eubacteria, **Bacteria** , Microorganisms...

...Eubacteria, **Bacteria** , Microorganisms
...ORGANISMS: PARTS ETC: **bacterial**
COMMON TAXONOMIC TERMS: **Bacteria** ;
CHEMICALS & BIOCHEMICALS: ... **bacterial** , heterologous, insertion, sequential **chromosomal** **integration** ; ...

... **antibiotic** , **selectable marker** ; ...

... **antibiotic** , **selectable marker** ; ...

... **flippase** recombinase...

... **antibiotic** , **selectable marker** ;
? ds

Set	Items	Description
S1	0	(TRIPLE (W) HOMOLOGOUS (W) RECOMBINATION)
S2	4067	(CHROMOSOM?? (W) (ENGINEERING OR INTEGRATION))
S3	3526	S2 NOT PD>021211
S4	0	S3 AND ((TRIPLE OR MULTIPLE) (W) HOMOLOGOUS (W) RECOMBINATION)
S5	5	((MULTIPLE) (W) HOMOLOGOUS (W) RECOMBINATION)
S6	2	S5 NOT PD>021219
S7	1	RD (unique items)
S8	124	((RED (W)(RECOMBINASE OR RECOMBINATION) (W) SYSTEM) OR (LAMBDA-RED (W) (RECOMBINASE OR RECOMBINATION) (W) SYSTEM) OR (L-

```
            AMBDA (W) RED (W)(RECOMBINASE OR RECOMBINATION) (W) SYSTEM) OR
             (LAMBDA-RED (W) HELPER (W) PLASMID) OR (LAMBDA (W) RED (W) H-
            ELPER (W) PLA
S9          73   S8 NOT PD>021219
S10          2   S9 AND ((SITE-SPECIFIC (W) RECOMBINASE) OR (SITE (W) SPECI-
            FIC (W) RECOMBINASE) OR CRE/LOX OR FLIPPASE OR FLP OR  XER/DIF
             OR INT/ATT)
S11          1   S9 AND ((SITE-SPECIFIC (W) RECOMBINASE) OR (SITE (W) SPECI-
            FIC (W) RECOMBINASE) OR (CRE(W)LOX) OR FLIPPASE OR FLP OR  (X-
            ER(W) DIF) OR (INT(W) ATT))
S12          1   S8 AND (BACTERIA?? AND (CHROMOSOM?? (W) (ENGINEERING OR IN-
            TEGRATION)))
S13          7   S8 AND ((SELECTABLE (W) MARKER) OR (KANAMYCIN (W) SELECT??-
            ?? (W) MARKER) OR (ANTIBIOTIC (W) SELECT???? (W) MARKER) OR (-
            ENZYME (W) SELECT???? (W) MARKER) OR (ANTIBIOTIC (W) RESISTAN-
            CE (W) MARKER) OR (ENZYMATIC (W) MARKER))
S14          5   RD (unique items)
S15          0   S10 AND S14
S16         79   S2 AND ((SITE-SPECIFIC (W) RECOMBINASE) OR (SITE (W) SPECI-
            FIC (W) RECOMBINASE) OR (CRE(W)LOX) OR FLIPPASE OR FLP OR  (X-
            ER(W) DIF) OR (INT(W) ATT))
S17         70   S16 NOT PD>021219
S18         11   S17 AND ((SELECTABLE (W) MARKER) OR (KANAMYCIN (W) SELECT?-
            ??? (W) MARKER) OR (ANTIBIOTIC (W) SELECT???? (W) MARKER) OR -
            (ENZYME (W) SELECT???? (W) MARKER) OR (ANTIBIOTIC (W) RESISTA-
            NCE (W) MARKER) OR (ENZYMATIC (W) MARKER))
S19          8   RD (unique items)
S20          0   S19 AND ((EXPRESS???? DNA (W) FRAGMENT) AND ((REGULATORY (-
            N)ELEMENT) OR PROMOTER OR (PHAGE (W) PROMOTER) OR (BACTERIAL -
            (W) PROMOTER) OR ORF OR (OPEN (W) READING (W) FRAME)))
S21         36   19 AND (BACTERIA?? AND (CHROMOSOM?? (W) (ENGINEERING OR IN-
            TEGRATION)))
S22          2   S19 AND (BACTERIA?? AND (CHROMOSOM?? (W) (ENGINEERING OR I-
            NTEGRATION)))
S23          2   RD (unique items)
? s s8 and (bacteria?? and (chromosom?? (w) (engineering or integration)))
              124  S8
          4230988  BACTERIA??
          1618678  CHROMOSOM??
          1872672  ENGINEERING
           498205  INTEGRATION
             4067  CHROMOSOM??(W)(ENGINEERING OR INTEGRATION)
     S24        1  S8 AND (BACTERIA?? AND (CHROMOSOM?? (W) (ENGINEERING OR
                   INTEGRATION)))
? type s24/free

 24/8/1     (Item 1 from file: 357)
0345211  DBR Accession No.: 2004-17503
Directed integration of an expressible DNA fragment lacking a selectable
    marker into a  bacterial  chromosome comprises co-transforming
    recombination proficient host with at least two linear recombination
    elements - DNA fragment integration via recombination for use in
    biosynthetic pathway engineering  2004
? type s24/medium,k

 24/K/1     (Item 1 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.
(c) 2005 Thomson Derwent & ISI. All rts. reserv.

0345211  DBR Accession No.: 2004-17503    PATENT
Directed integration of an expressible DNA fragment lacking a selectable
```

marker into a bacterial **chromosome comprises co-transforming recombination proficient host with at least two linear recombination elements - DNA fragment integration via recombination for use in biosynthetic pathway engineering**

AUTHOR: SUH W

PATENT ASSIGNEE: DU PONT DE NEMOURS and CO E I 2004

PATENT NUMBER: WO 200456973 PATENT DATE: 20040708 WPI ACCESSION NO.: 2004-507710 (200448)

PRIORITY APPLIC. NO.: US 434602 APPLIC. DATE: 20021219

NATIONAL APPLIC. NO.: WO 2003US41810 APPLIC. DATE: 20031219

LANGUAGE: English

Directed integration of an expressible DNA fragment lacking a selectable marker into a bacterial **chromosome comprises co-transforming recombination proficient host with at least two linear recombination elements - DNA...**

...ABSTRACT: ABSTRACT: NOVELTY - Directed integration of an expressible DNA fragment lacking a selectable marker into a **bacterial** chromosome comprises co-transforming recombination proficient host with at least two linear recombination elements, is...

... DETAILED DESCRIPTION - Directed integration of an expressible DNA fragment lacking a selectable marker into a **bacterial** chromosome comprises co-transforming recombination proficient host with at least two linear recombination elements: (a...

... RR3 is a third recombination of about 10-50 bases; (c) providing a recombination proficient **bacterial** host harboring a **lambda - Red recombinase system** , having a **bacterial** chromosome comprising: (i) a first chromosomal region having homology to the first recombination region; (ii...

... host with the first and second recombination elements, where both elements are integrated into the **bacterial** chromosome between the first and second chromosomal regions forming a construct having the general structure...

...is excised from the chromosome and where the expressible DNA fragment is inserted into the **bacterial** chromosome lacking the selectable marker. BIOTECHNOLOGY - Preferred Method: In the directed integration of an expressible DNA fragment lacking a selectable marker into a **bacterial** chromosome, either the first or second expressible DNA fragment is selected from regulatory elements, promoters...

... by a gene residing on a plasmid. The first chromosomal region is upstream of a **bacterial** promoter or of an inter-operon **chromosomal integration** site. The expressible DNA fragment is a promoter selected from **bacterial** and phage promoters. The promoter comprises positive and negative regulatory sites for control of a...

... resistance markers, enzymatic markers and amino acid biosynthesis enzymes. The recombination proficient host harboring a **lambda - Red recombinase system** is selected from Escherichia, Salmonella, Acinetobacter, Methylomonas, Bacillus and Pseudomonas. The recombination sites are selected...

... and are about 25-4000 bases. Alternatively, integrating a foreign promoter in place of a **bacterial** chromosomal promoter in a recombination proficient host cell or integrating an unlinked foreign promoter and foreign open reading frame into a **bacterial** chromosome

in a recombination proficient host cell comprises: (a) providing at least one first recombination...

... RR3 is a third recombination of about 10-50 bases; (c) providing a recombination proficient **bacterial** host harboring a **lambda - Red recombinase system** having a **bacterial** chromosome comprising: (i) a first chromosomal region upstream of a **bacterial** promoter having homology to the first recombination region; (ii) a second chromosomal region downstream of the **bacterial** promoter having homology to the third recombination region; (d) transforming the recombination proficient host with the first and second recombination elements, where both elements are integrated into the **bacterial** chromosome between the first and second chromosomal regions forming a construct having the general structure...

... marker is excised from the chromosome and where the foreign promoter is inserted into the **bacterial** chromosome in place of the **bacterial** promoter. The steps (d)-(f) are repeated one or more times. USE - The method is...

DESCRIPTORS: expressible DNA fragment integration, bacterium chromosome, co-transforming recombination proficient host, linear recombination element, **lambda - red recombinase system** , selectable marker, appl. multiple chromosome modification, biosynth. pathway engineering, material prep. (23, 37)

```
? s ((first (w) recombination (w) (region or site)) and ((site-specific or
(site (w) specific)) (w) recombinase) and (selectable (w) marker) and (second
(w) recombination (w) (region or site)) and (third (w) recombination (w)
(region or site)))
Processed  10 of  29 files ...
Processing
Processed  20 of  29 files ...
Completed processing all files
         6063978  FIRST
          376085  RECOMBINATION
         5398949  REGION
         3085655  SITE
              29  FIRST(W)RECOMBINATION(W)(REGION OR SITE)
            5664  SITE-SPECIFIC
         3085655  SITE
         5875582  SPECIFIC
          124348  SITE(W)SPECIFIC
           18918  RECOMBINASE
            1773  (SITE-SPECIFIC OR SITE(W)SPECIFIC)(W)RECOMBINASE
           30062  SELECTABLE
          925783  MARKER
           19409  SELECTABLE(W)MARKER
         2849870  SECOND
          376085  RECOMBINATION
         5398949  REGION
         3085655  SITE
              43  SECOND(W)RECOMBINATION(W)(REGION OR SITE)
         1322737  THIRD
          376085  RECOMBINATION
         5398949  REGION
         3085655  SITE
               6  THIRD(W)RECOMBINATION(W)(REGION OR SITE)
     S25       1  ((FIRST (W) RECOMBINATION (W) (REGION OR SITE)) AND
                  ((SITE-SPECIFIC OR (SITE (W) SPECIFIC)) (W) RECOMBINASE)
                  AND (SELECTABLE (W) MARKER) AND (SECOND (W) RECOMBINATION
                  (W) (REGION OR SITE)) AND (THIRD (W) RECOMBINATION (W)
                  (REGION OR SITE)))
```

```
? type s25/free

 25/8/1     (Item 1 from file: 357)
0345211  DBR Accession No.: 2004-17503
Directed integration of an expressible DNA fragment lacking a  selectable
    marker  into a bacterial chromosome comprises co-transforming
    recombination proficient host with at least two linear recombination
    elements - DNA fragment integration via recombination for use in
    biosynthetic pathway engineering  2004
? ds

Set     Items   Description
S1          0   (TRIPLE (W) HOMOLOGOUS (W) RECOMBINATION)
S2       4067   (CHROMOSOM?? (W) (ENGINEERING OR INTEGRATION))
S3       3526   S2 NOT PD>021211
S4          0   S3 AND ((TRIPLE OR MULTIPLE) (W) HOMOLOGOUS (W) RECOMBINAT-
                 ION)
S5          5   (( MULTIPLE) (W) HOMOLOGOUS (W) RECOMBINATION)
S6          2   S5 NOT PD>021219
S7          1   RD (unique items)
S8        124   ((RED (W)(RECOMBINASE OR RECOMBINATION) (W) SYSTEM) OR (LA-
                 MBDA-RED (W) (RECOMBINASE OR RECOMBINATION) (W) SYSTEM) OR (L-
                 AMBDA (W) RED (W)(RECOMBINASE OR RECOMBINATION) (W) SYSTEM) OR
                  (LAMBDA-RED (W) HELPER (W) PLASMID) OR (LAMBDA (W) RED (W) H-
                 ELPER (W) PLA
S9         73   S8 NOT PD>021219
S10         2   S9 AND ((SITE-SPECIFIC (W) RECOMBINASE) OR (SITE (W) SPECI-
                 FIC (W) RECOMBINASE) OR CRE/LOX OR FLIPPASE OR FLP OR  XER/DIF
                  OR INT/ATT)
S11         1   S9 AND ((SITE-SPECIFIC (W) RECOMBINASE) OR (SITE (W) SPECI-
                 FIC (W) RECOMBINASE) OR (CRE(W)LOX) OR FLIPPASE OR FLP OR  (X-
                 ER(W) DIF) OR (INT(W) ATT))
S12         1   S8 AND (BACTERIA?? AND (CHROMOSOM?? (W) (ENGINEERING OR IN-
                 TEGRATION)))
S13         7   S8 AND ((SELECTABLE (W) MARKER) OR (KANAMYCIN (W) SELECT??-
                 ?? (W) MARKER) OR (ANTIBIOTIC (W) SELECT???? (W) MARKER) OR (-
                 ENZYME (W) SELECT???? (W) MARKER) OR (ANTIBIOTIC (W) RESISTAN-
                 CE (W) MARKER) OR (ENZYMATIC (W) MARKER))
S14         5   RD (unique items)
S15         0   S10 AND S14
S16        79   S2 AND ((SITE-SPECIFIC (W) RECOMBINASE) OR (SITE (W) SPECI-
                 FIC (W) RECOMBINASE) OR (CRE(W)LOX) OR FLIPPASE OR FLP OR  (X-
                 ER(W) DIF) OR (INT(W) ATT))
S17        70   S16 NOT PD>021219
S18        11   S17 AND ((SELECTABLE (W) MARKER) OR (KANAMYCIN (W) SELECT?-
                 ??? (W) MARKER) OR (ANTIBIOTIC (W) SELECT???? (W) MARKER) OR -
                 (ENZYME (W) SELECT???? (W) MARKER) OR (ANTIBIOTIC (W) RESISTA-
                 NCE (W) MARKER) OR (ENZYMATIC (W) MARKER))
S19         8   RD (unique items)
S20         0   S19 AND ((EXPRESS???? DNA (W) FRAGMENT) AND ((REGULATORY (-
                 N)ELEMENT) OR PROMOTER OR (PHAGE (W) PROMOTER) OR (BACTERIAL -
                 (W) PROMOTER) OR ORF OR (OPEN (W) READING (W) FRAME)))
S21        36   19 AND (BACTERIA?? AND (CHROMOSOM?? (W) (ENGINEERING OR IN-
                 TEGRATION)))
S22         2   S19 AND (BACTERIA?? AND (CHROMOSOM?? (W) (ENGINEERING OR I-
                 NTEGRATION)))
S23         2   RD (unique items)
S24         1   S8 AND (BACTERIA?? AND (CHROMOSOM?? (W) (ENGINEERING OR IN-
                 TEGRATION)))
S25         1   ((FIRST (W) RECOMBINATION (W) (REGION OR SITE)) AND ((SITE-
                 -SPECIFIC OR (SITE (W) SPECIFIC)) (W) RECOMBINASE) AND (SELEC-
```

```
            TABLE (W) MARKER) AND (SECOND (W) RECOMBINATION (W) (REGION OR
             SITE)) AND (THIRD (W) RECOMBINATION (W) (REGION OR SITE)))
? b411
      01dec05 13:02:41 User276741 Session D64.2
          $22.13    3.751 DialUnits File5
              $0.00  3 Type(s) in Format  6
              $0.64  4 Type(s) in Format 95 (KWIC)
           $0.64  7 Types
    $22.77  Estimated cost File5
           $6.76    1.090 DialUnits File24
     $6.76  Estimated cost File24
           $1.38    0.222 DialUnits File28
     $1.38  Estimated cost File28
          $74.48    3.364 DialUnits File34
              $0.00  3 Type(s) in Format  8
           $0.00  3 Types
    $74.48  Estimated cost File34
           $2.25    0.549 DialUnits File35
     $2.25  Estimated cost File35
           $1.56    0.218 DialUnits File40
     $1.56  Estimated cost File40
           $1.47    0.237 DialUnits File41
     $1.47  Estimated cost File41
           $4.17    0.906 DialUnits File50
              $0.00  1 Type(s) in Format  8
           $0.00  1 Types
     $4.17  Estimated cost File50
           $1.19    0.316 DialUnits File65
     $1.19  Estimated cost File65
          $11.20    1.280 DialUnits File71
    $11.20  Estimated cost File71
          $27.63    2.599 DialUnits File73
    $27.63  Estimated cost File73
           $0.60    0.139 DialUnits File91
     $0.60  Estimated cost File91
           $2.58    0.737 DialUnits File94
     $2.58  Estimated cost File94
           $1.87    0.440 DialUnits File98
              $0.00  2 Type(s) in Format  8
           $0.00  2 Types
     $1.87  Estimated cost File98
           $0.73    0.126 DialUnits File110
     $0.73  Estimated cost File110
           $1.97    0.365 DialUnits File135
     $1.97  Estimated cost File135
           $1.39    0.224 DialUnits File136
     $1.39  Estimated cost File136
           $1.02    0.340 DialUnits File143
     $1.02  Estimated cost File143
          $11.21    2.492 DialUnits File144
    $11.21  Estimated cost File144
           $8.29    2.439 DialUnits File155
     $8.29  Estimated cost File155
           $0.46    0.133 DialUnits File164
     $0.46  Estimated cost File164
           $2.02    0.190 DialUnits File172
     $2.02  Estimated cost File172
           $1.92    0.312 DialUnits File185
     $1.92  Estimated cost File185
          $11.33    0.539 DialUnits File357
              $4.90  2 Type(s) in Format  3
```

```
            $0.00  4 Type(s) in Format  6
          $4.90  6 Types
    $16.23  Estimated cost File357
          $0.46    0.133 DialUnits File369
     $0.46  Estimated cost File369
          $0.43    0.124 DialUnits File370
     $0.43  Estimated cost File370
          $0.00    0.252 DialUnits File391
     $0.00  Estimated cost File391
          $8.75    0.395 DialUnits File434
     $8.75  Estimated cost File434
          $0.56    0.088 DialUnits File467
     $0.56  Estimated cost File467
          OneSearch, 29 files, 24.002 DialUnits FileOS
     $7.73  TELNET
   $223.08  Estimated cost this search
   $223.11  Estimated total session cost  24.224 DialUnits

File 411:DIALINDEX(R)

DIALINDEX(R)
   (c) 2005 Dialog

*** DIALINDEX search results display in an abbreviated ***
*** format unless you enter the SET DETAIL ON command. ***
? sf allbiosci
   You have 81 files in your file list.
   (To see banners, use SHOW FILES command)
? s ((Red (w)(recombinase or recombination) (w) system) or (lambda-Red (w)
(recombinase or recombination) (w) system) or (lambda (w) Red (w)(recombinase
or recombination) (w) system) or (lambda-Red (w) helper (w) plasmid) or
(lambda (w) Red (w) helper (w) plasmid) or (lambda-Red (w) system) or (lambda
(w) Red (w) system) or pKD46) and ((BACTERIA?? AND (CHROMOSOM?? (W)
(ENGINEERING OR INTEGRATION)))

Your SELECT statement is:
   s ((Red (w)(recombinase or recombination) (w) system) or (lambda-Red (w)
(recombinase or recombination) (w) system) or (lambda (w) Red
(w)(recombinase or recombination) (w) system) or (lambda-Red (w) helper (w)
plasmid) or (lambda (w) Red (w) helper (w) plasmid) or (lambda-Red (w)
system) or (lambda (w) Red (w) system) or pKD46) and ((BACTERIA?? AND
(CHROMOSOM?? (W) (ENGINEERING OR INTEGRATION)))

           Items   File
           -----   ----
>>>Unmatched parentheses
? s ((Red (w)(recombinase or recombination) (w) system) or (lambda-Red (w)
(recombinase or recombination) (w) system) or (lambda (w) Red (w)(recombinase
or recombination) (w) system) or (lambda-Red (w) helper (w) plasmid) or
(lambda (w) Red (w) helper (w) plasmid) or (lambda-Red (w) system) or (lambda
(w) Red (w) system) or pKD46) and ((BACTERIA?? AND (CHROMOSOM?? (W)
(ENGINEERING OR INTEGRATION))

Your SELECT statement is:
   s ((Red (w)(recombinase or recombination) (w) system) or (lambda-Red (w)
(recombinase or recombination) (w) system) or (lambda (w) Red
(w)(recombinase or recombination) (w) system) or (lambda-Red (w) helper (w)
plasmid) or (lambda (w) Red (w) helper (w) plasmid) or (lambda-Red (w)
system) or (lambda (w) Red (w) system) or pKD46) and ((BACTERIA?? AND
(CHROMOSOM?? (W) (ENGINEERING OR INTEGRATION))
```

```
          Items   File
          -----   ----
>>>Unmatched parentheses
? s ((Red (w)(recombinase or recombination) (w) system) or (lambda-Red (w)
(recombinase or recombination) (w) system) or (lambda (w) Red (w)(recombinase
or recombination) (w) system) or (lambda-Red (w) helper (w) plasmid) or
(lambda (w) Red (w) helper (w) plasmid) or (lambda-Red (w) system) or (lambda
(w) Red (w) system) or pKD46) and (BACTERIA?? AND (CHROMOSOM?? (W)
(ENGINEERING OR INTEGRATION)))

Your SELECT statement is:
   s ((Red (w)(recombinase or recombination) (w) system) or (lambda-Red (w)
(recombinase or recombination) (w) system) or (lambda (w) Red
(w)(recombinase or recombination) (w) system) or (lambda-Red (w) helper (w)
plasmid) or (lambda (w) Red (w) helper (w) plasmid) or (lambda-Red (w)
system) or (lambda (w) Red (w) system) or pKD46) and (BACTERIA?? AND
(CHROMOSOM?? (W) (ENGINEERING OR INTEGRATION)))

          Items   File
          -----   ----
      Examined  50 files
              1   357: Derwent Biotech Res.__1982-2005/Dec W1

   1 file has one or more items; file list includes 81 files.

? s ((first (w) recombination (w) (region or site)) and ((site-specific or
(site (w) specific)) (w) recombinase) and (selectable (w) marker) and (second
(w) recombination (w) (region or site)) and (third (w) recombination (w)
(region or site)))

Your SELECT statement is:
   s ((first (w) recombination (w) (region or site)) and ((site-specific or
(site (w) specific)) (w) recombinase) and (selectable (w) marker) and
(second (w) recombination (w) (region or site)) and (third (w)
recombination (w) (region or site)))

          Items   File
          -----   ----
      Examined  50 files
              1   357: Derwent Biotech Res.__1982-2005/Dec W1

   1 file has one or more items; file list includes 81 files.

? ds
>>>"DS" command not valid in DIALINDEX.
? save temp
Temp SearchSave "TC151700137" stored
? logoff
       01dec05 13:08:41 User276741 Session D64.3
           $13.53    5.107 DialUnits File411
    $13.53  Estimated cost File411
     $1.86  TELNET
    $15.39  Estimated cost this search
   $238.50  Estimated total session cost  29.331 DialUnits


Logoff: level 05.08.04 D  13:08:41


You are now logged off
```